

G. L. FORMAN.
HARNESS STAY.
APPLICATION FILED JAN. 28, 1908.

911,965.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.

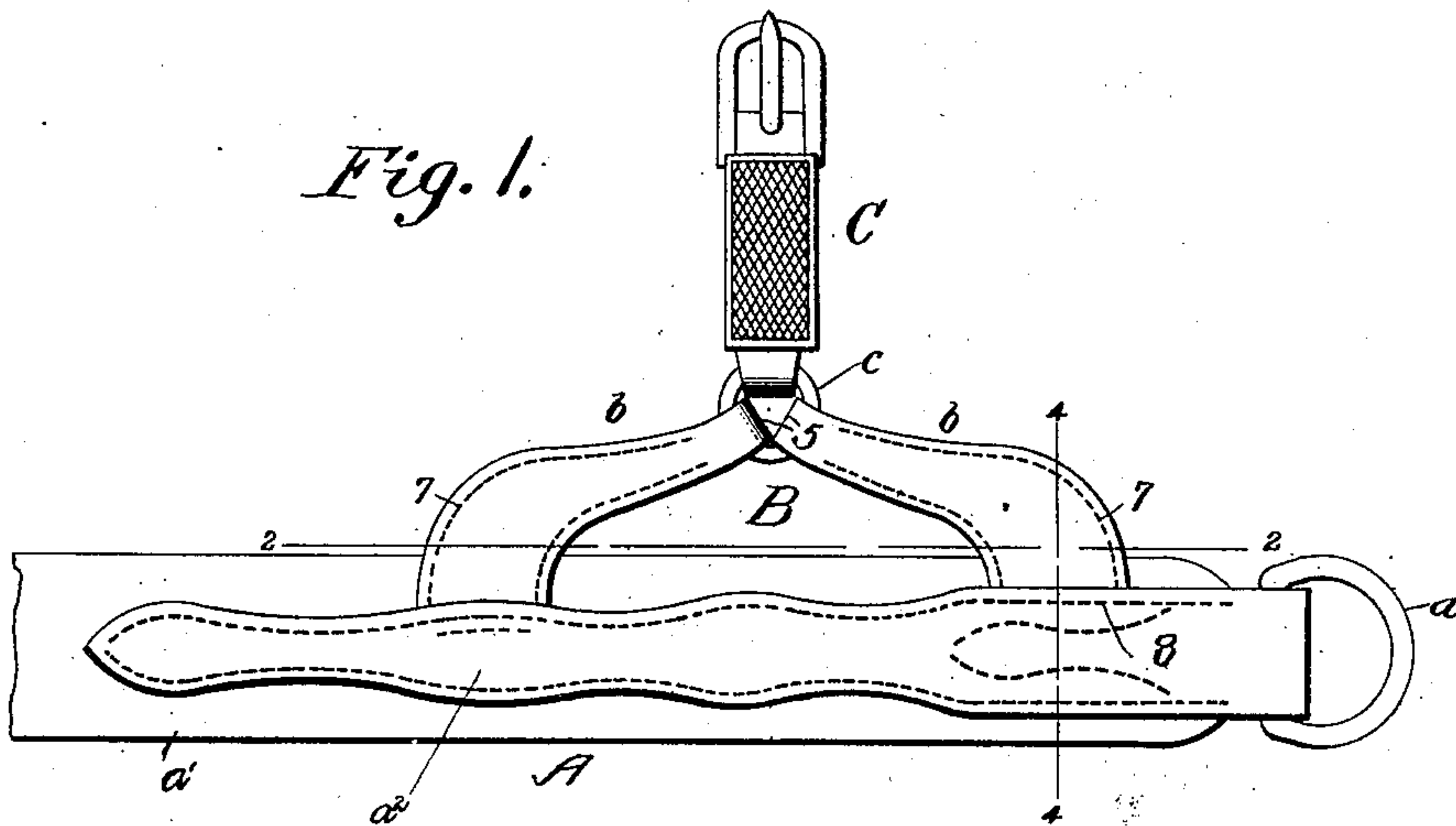


Fig. 4.

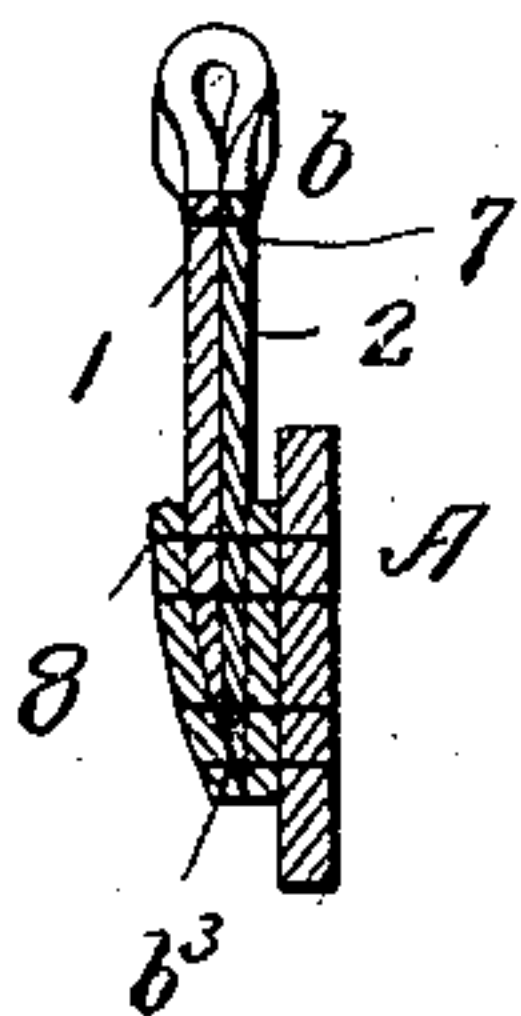
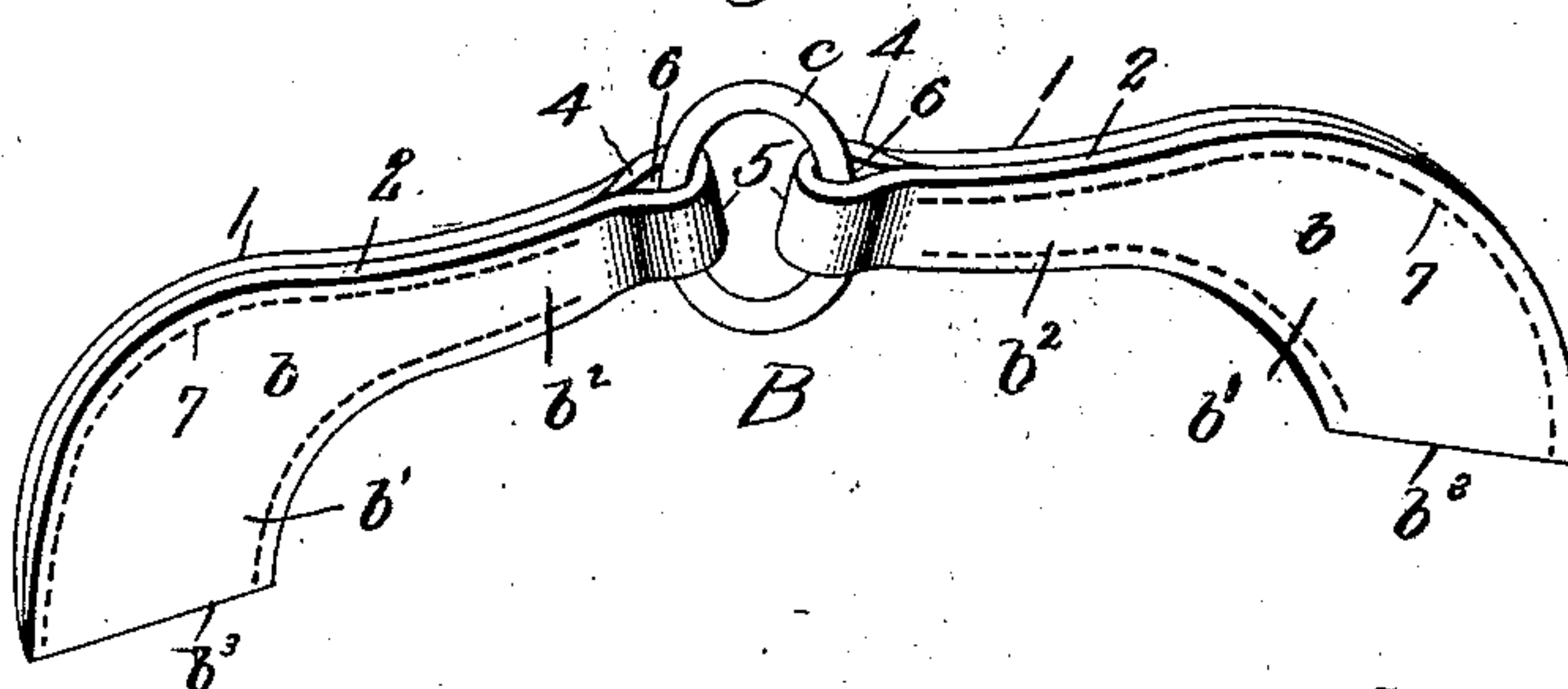


Fig. 3.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

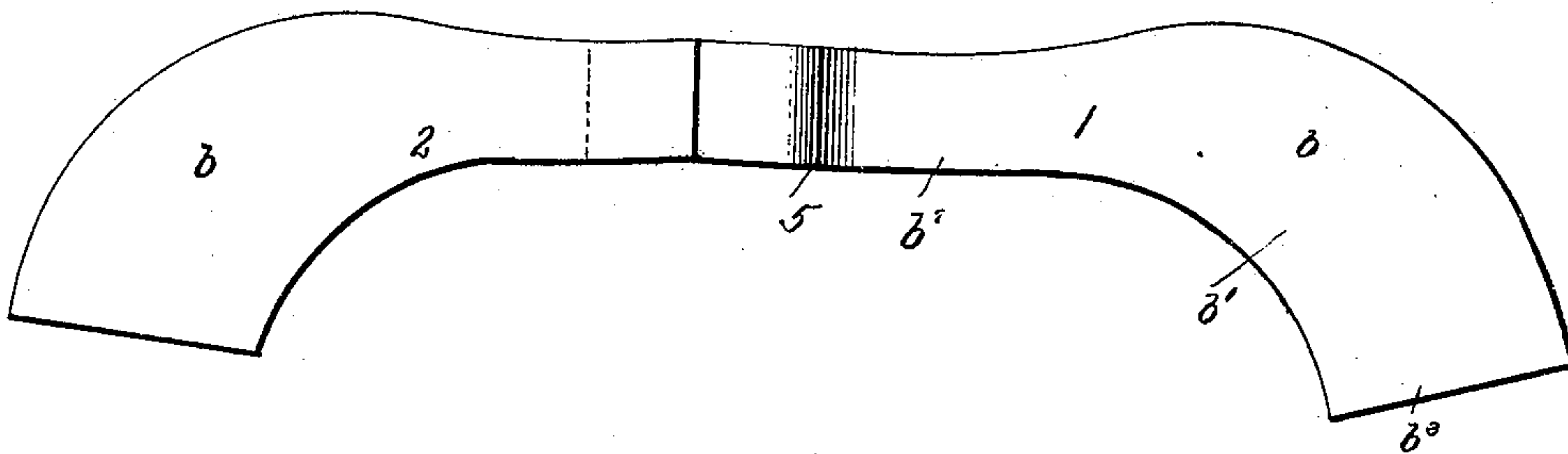


Fig. 6.

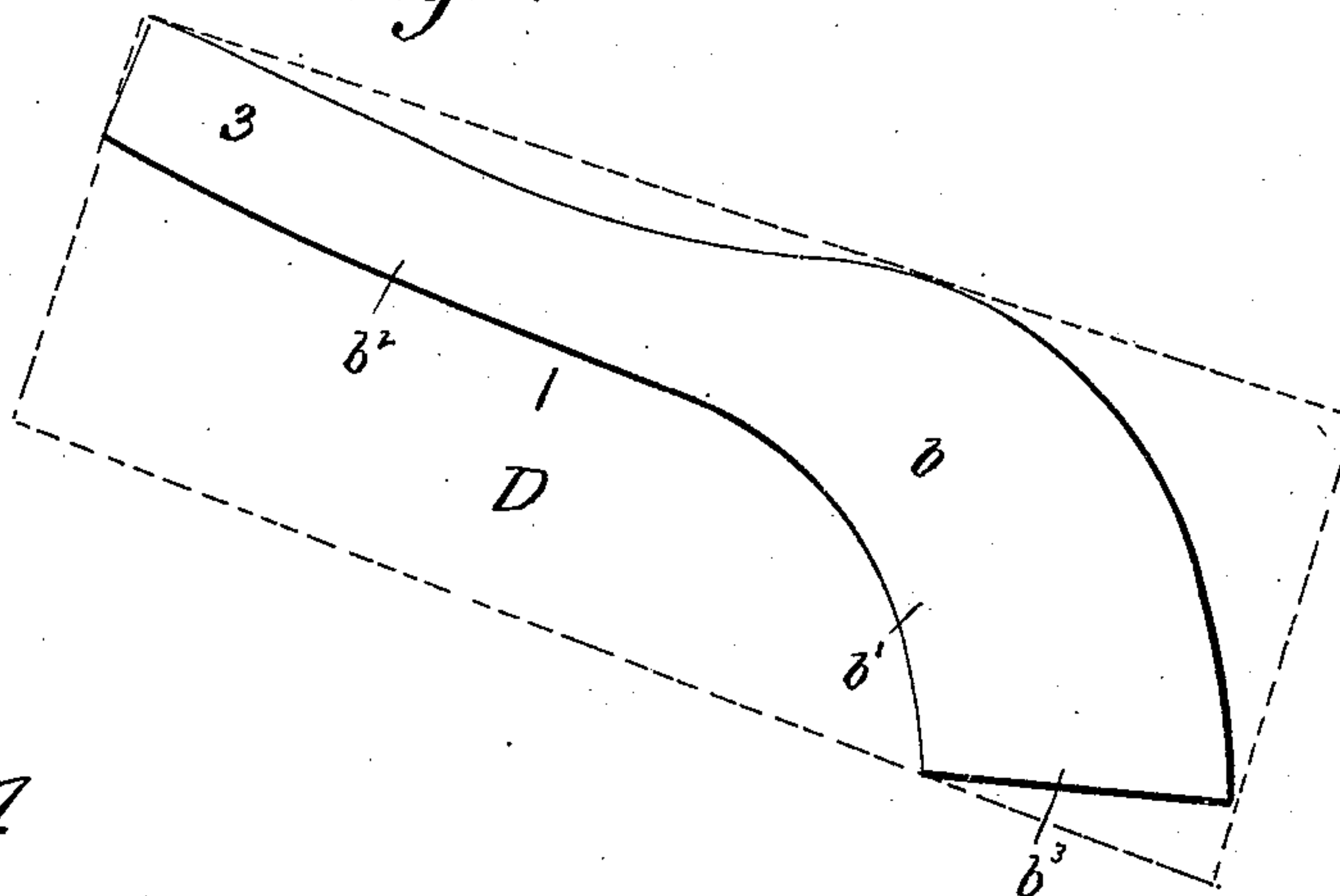
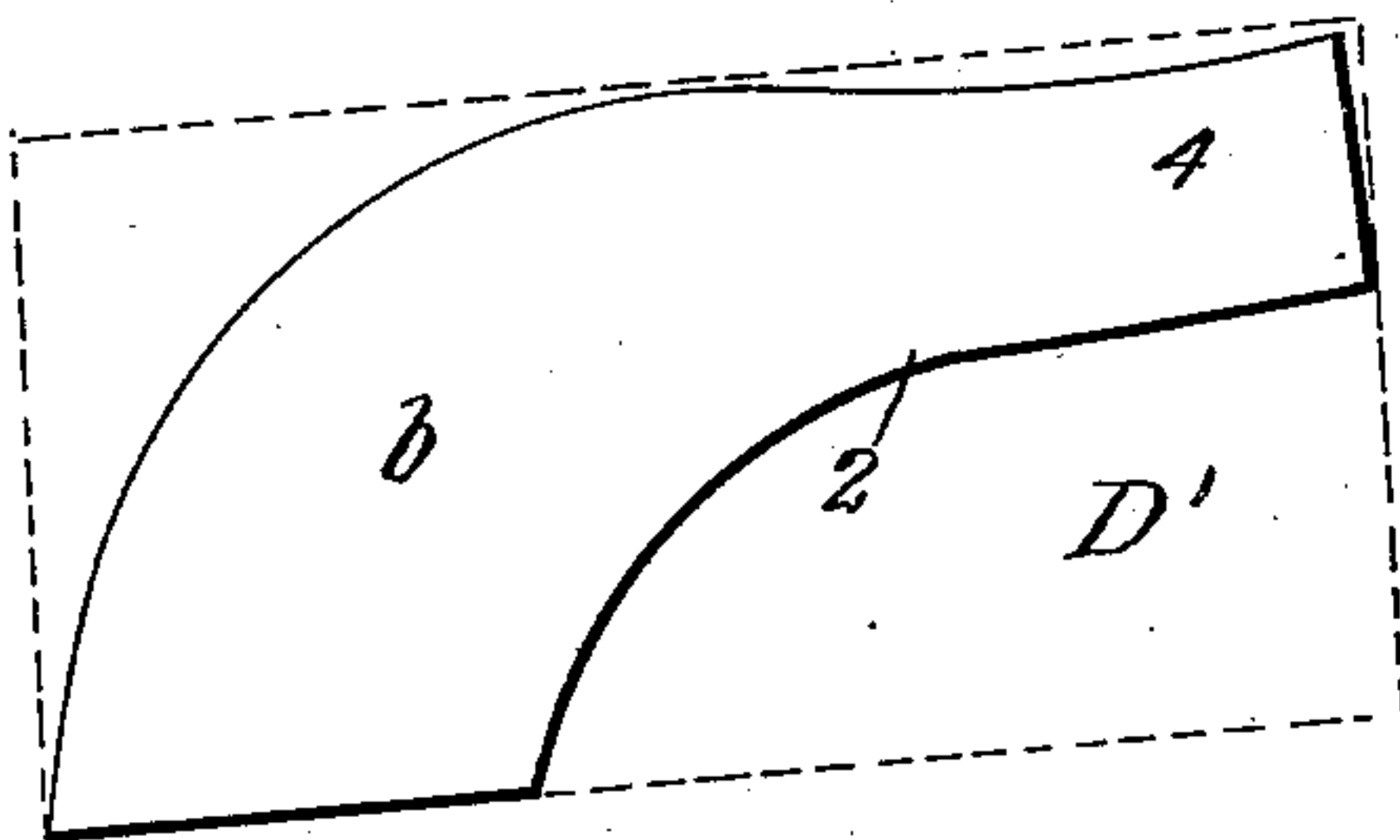


Fig. 7.



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GEORGE L. FORMAN, OF LOUISVILLE, KENTUCKY.

HARNESS-STAY.

No. 911,965.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed January 28, 1908. Serial No. 413,011.

To all whom it may concern:

Be it known that I, GEORGE L. FORMAN, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Harness-Stays, of which the following is a specification.

This invention relates to improvements in stays adapted to support a part of the body of a harness, as for instance, the breeching thereof, and has for its main purpose the provision of a stay of attractive appearance and most simple, economical and durable construction: one which may be cut to the shape which it is to have when in use, will maintain that shape for an indefinite time against climatic influences and the tendency of the breeching, or other part of the harness body which it supports, to pull it out of shape, and is adapted to be made from scraps of leather which cannot be used to produce stays of the constructions hitherto proposed. This object is secured by the construction illustrated in the accompanying drawings in which I have exemplified the invention as embodied in a breeching stay, but it is to be understood at the outset that the invention may be embodied in harness stays intended to support other parts of harness-bodies than breechings, specifically. Therefore, it is to be understood that this particular exemplification of the invention is for illustrative purposes merely and that the invention may be attached to other parts of a harness body without departure from the spirit thereof or the scope of the subjoined claims.

In said drawings: Figure 1 is a side view of a portion of a breeching provided with my improved stay. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of the stay removed from the breeching. Fig. 4 is a vertical section on the line 4—4 of Fig. 1. Fig. 5 is a detail view, full size, of a stay member, with its parts assembled, but not stitched together. Figs. 6 and 7 are plan view, full size, of the two complementary parts of a stay member showing in dotted outline, the scraps of leather from which they may be cut.

The same characters of reference designate the same parts in the several views.

A designates the portion of the body of the harness which is to be supported by the stay constituting the present invention, said por-

tion being herein shown as a part of the main body of the breeching, having the ring *a* with which the end of the breeching is usually attached to the hold-back strap of the harness. This part A will hereinafter be referred to as the body strap.

B designates the stay considered as a whole, intended to support the body-strap A and C designates the up-tug of the harness. The stay is connected to the up-tug by a ring or other suitable connecting device *c*. This stay is made of two members *b*, *b* formed separately from each other and from the strap A and having their lower ends secured to the strap A between the body *a'* and layer *a''* thereof, and these two members are connected with each other by the connecting device *c* before mentioned.

In order that my invention may be thoroughly understood I consider it to be expedient before entering upon a more detail description of the construction of the present stay, to refer to the method ordinarily practiced in the production of breeching stays and their attachment to the breeching. These stays as universally used each consists of two members corresponding to the members *b*, *b* connected with each other and with the up-tug by a ring, square or dee *c*. Each of these members is formed either of a long strap doubled upon itself and stitched together except at the ends of the member, the folds of the strap being left free from attachment to each other at the ends in order to provide eyes or loops for the rings, squares or dees: or else, the straps are by means of appropriate machinery given a rolled or rounded form when a round stay is desired. In the latter case the blank is made from a wider strip of leather than in the first instance and a narrow filling strip is inserted longitudinally of the stay between the edges of the main strap thereof and the parts are secured together by appropriate lines of stitches. In each case the members are given the appropriate shape by being bent while in a wet condition, this shape being characterized generally by a compound curvature of the body of the member from the ring *c* to the breeching, in order that it may present an attractive appearance.

It is found in practice that these stays do not maintain such shape for any considerable length of time, owing to the fact that their constant tendency is to resume their natural

straight form from which they were bent while wet. The weight of the breeching assisted by the tendency referred to very shortly causes the stay to resume its original and natural straight form, particularly after the stay has been again wet. Again, these members being formed from straps essentially having considerable length cannot be made from scraps of leather of which large quantities are constantly accumulating in all harness factories and which scraps are customarily sold as waste at a nominal price. In order to overcome these disadvantages I have produced a stay of which the members b , b are essentially formed by cutting each of the same to the shape in which they are to be used, and each consisting of a neck b^2 and a base b' formed integral and arranged approximately at right angles with each other. The edges of each member at the junction of the base b' and neck b^2 are formed of curves of different radii, whereby the member is stiffened at this place where the strains are great. By reason of this shape of the stay member and by reason of the fact that such shape is that to which it is formed in the first instance (instead of being bent thereto while wet) the stay is enabled effectively to resist all tendency to straighten out under the weight of the breeching, or other parts supported thereby, as well as the strains which are transmitted thereto from the hold-back, and at the same time presents a most attractive appearance. Moreover, the extremity b^3 of the base b' is broadened, thus affording an effective means by which the member b may be stitched or otherwise secured directly to the breeching body or body strap A, between the layers a' and a^2 thereof thus obviating the necessity of the use of dees, squares or rings as a means for attaching the ends of the members b to the breeching. This is preferably true as to both members, although if desired one member may be attached to the ring a as usual, my principal aim in respect of the attachment to the body strap A being to avoid the necessity of using the unreliable and non-durable mode, comprising the ring, dee or square, now practiced in attaching the other members to the breeching or body strap A.

In Figs. 6 and 7 I have shown blanks D and D' in dotted outline to illustrate clearly the practicability of making the stay from scrap leather. Each member is made in two parts, 1 and 2, one preferably having a longer narrowed portion (3) than the other, (4) to afford a sufficient length for folding it on the line 5, to form the eye 6 for the ring c . The two portions of the stay members are stitched together on the lines 7. In producing each stay member illustrated, the blanks D and D' are cut on lines appropriate to produce the parts 1 and 2 therefrom. The part 3 of one member is then folded on the

line 5 and the two parts 1 and 2 stitched together and the stay member completed by the stitching 7. It will be understood, of course, that the ring c is inserted in the parts forming the eyes 6 of two members, at an appropriate stage of the procedure. The broad end of the stay members b are then stitched to the breeching A, by the line of stitching 8.

While I have shown scraps of approximately rectangular shape, yet it will be apparent that the stay may be formed from scraps of irregular shape, of which many are produced in the formation of harness.

It will be apparent that my invention is not restricted to the details illustrated and that many changes may be made therein, and many apparently widely different variations of the invention produced, without departing from the spirit of the invention or the scope of the subjoined claims. I, therefore, do not wish to be understood as being restricted to the particular form of the invention herein illustrated, which is merely intended to represent what I regard as the embodiment of the invention which to the fullest extent accomplished the several ends which I have in view.

While I have described the invention with particular reference to its use for breechings, it is apparent that it is adaptable for use on breast collars as well, and such use is intended to be herein covered.

Having thus described the invention what I believe to be new and desire to secure by Letters Patent, is:—

1. A harness stay comprising a connecting device and a body formed of leather cut to shape comprising a neck adapted to be attached to said device and a base integral with the neck and arranged at an angle therewith, the portion of the body at the junction of the base and neck having a greater diameter than the portion of the neck which is secured to said device and the base having a broad extremity adapted to be attached to the part of the harness supported by the stay.

2. A harness stay comprising two-separately formed members and a connection therebetween by which the contiguous ends of the members are attached to the up-tug of the harness, each of said members formed of leather cut to shape comprising a neck and a body or base arranged at an angle to and integral with each other, and each having its edges at the junction of its neck and body formed on curves of different radii to stiffen the stay at such place.

3. The combination with a body-strap having a body and a layer, of a stay for supporting the same, comprising two separately-formed members each composed of a base or body having a broad extremity arranged between the body and layer of the body-

strap and secured thereto and a neck, the neck and base or body of each of said members being integral and arranged at an angle with each other, and each member being 5 wider at the junction of the neck and base than at the opposite end of its neck and being cut to said shape and means which connect said member with each other and is adapted to be connected to the up-tug of the 10 harness.

4. A harness stay comprising two separately formed members connected with each other each composed of two separately formed superimposed strips (formed from 15 scrap leather secured together,) said strips being cut to shape and having a member with a neck and a base integral and arranged

at an angle with each other and wider at the junction of the neck and base than at an end of the member.

5. A breeching stay formed independently of its breeching and comprising side members of juxtaposed layers of leather cut to shape and embodying upper and relatively narrow inner ends suitably connected to 25 each other, and lower and relatively wide securing ends, at right angles to said inner ends, adapted to be stitched to the breeching.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE L. FORMAN.

Witnesses:

E. M. BREEN,

R. M. McGRATH.